

Claims

1. A handheld analysis device for analyzing a sample, in particular a biological liquid, for a medically significant component, comprising
5 an analysis sensor (15), to which an analytic consumable may be supplied along a conveyance path,
a display unit (3),
a housing (4), which has a housing opening (10) for an analytic consumable (9), the conveyance path leading to the housing opening (10),
10 characterized by a drivable conveyance roll (16, 18), by which a consumable (9) protruding into the conveyance path may be gripped and moved along the conveyance path.
2. The handheld analysis device according to Claim 1,
15 characterized in that the housing (4) has a loading opening (5) for receiving a replaceable drum magazine (6), which may contain analytic consumables (9), particularly test strips, and has at least one removal opening (12) on a front face, and
the housing (4) encloses a removal facility (29) for removing one of the
20 analytic consumables (9) from the drum magazine (6),
the removal facility (29) comprises the drivable conveyor roll (16, 18), which may grip a consumable (9) projecting out of the drum magazine (6) and into the conveyance path and move it entirely or partially out of the drum magazine (6) in a removal direction.
- 25 3. The handheld analysis device according to Claim 1 or 2, characterized in that the conveyance roll (16, 18) is drivable around its geometrical longitudinal axis both clockwise and also counterclockwise in order to be able to move a consumable (9) both in the removal direction and
30 also in the opposite direction.

4. The handheld analysis device according to any one of the preceding claims, characterized in that the conveyance roll (16, 18), together with a counter roll (31), forms a conveyance gap (33), through which the consumable (9) is moved.

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5. The handheld analysis device according to any one of Claims 1 through 3, characterized in that the conveyance roll (16, 18) and a conveyance surface stationary in relation thereto form together a conveyance gap (33), through which the consumable (9) is moved.

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6. The handheld analysis device according to Claim 3 or 4, characterized in that the conveyance gap (33) has a profile tailored to the consumable (9).

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7. The handheld analysis device according to Claim 6, characterized in that the conveyance surface or the counter roll has a groove (19) running in the conveyance direction.

8. The handheld analysis device according to any one of the preceding claims, characterized in that it has a conveyance base (17) extending along the conveyance path to support a removed consumable (9).

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9. The handheld analysis device according to Claim 8, characterized in that the conveyance surface is part of the conveyance base (17).

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10. The handheld analysis device according to any one of Claims 2 through 9, characterized in that the conveyance roll (16, 18) is situated directly adjacent to the front face, having the removal opening (12), of an inserted drum magazine (6).

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11. The handheld device according to any one of the preceding claims, characterized in that the conveyance roll (16, 18) has a surface adapted to increase friction.

5 12. The handheld analysis device according to any one of Claims 2 through 11, characterized in that the removal facility (29) has a further conveyance roll (18) for removing a consumable (9), the first conveyance roll (16) and the further conveyance roll (18) being situated at a distance from one another along the conveyance path.

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13. The handheld analysis device according to any one of Claims 2 through 12, characterized in that the removal facility (29) has a pushrod (14), which may be inserted into an insertion opening (13) diametrically opposite the removal opening (12) to push a consumable (9) out of the drum magazine
15 (6).

14. The handheld analysis device according to Claim 13, characterized in that the removal facility (29) has a drive (30), by which both the conveyance roll (16, 18) and also the pushrod (14) are jointly drivable.

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15. The handheld analysis device according to Claim 14, characterized in that the removal facility (29) has a threaded rod (20) having a thread (21), which extends laterally next to an inserted drum magazine (6) and works together with a shaft (24) to drive the conveyance roll (16, 18).

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16. The handheld analysis device according to Claim 15, characterized in that the drive (30) has a transmission (22) for moving the pushrod (14), which works together with the threaded rod (20) via a gearwheel (23) attached thereto.

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17. The handheld analysis device according to any one of Claims 2 through 16, characterized in that the removal facility (29) is implemented in such a manner that a used consumable (9) may be reintroduced into a chamber (11) of the drum magazine (6).